

WHAT IS CLAIMED IS:

1. A mold-release coating system for a mold surface, comprising:

5 a barrier coating of a substantially liquid wax material, wherein said wax material is deposited onto the mold surface, wherein said wax material includes about 7 to about 10 weight percent solids, wherein said wax material is permitted to substantially dry after 10 deposition onto the mold surface; and

a release powder deposited onto said barrier coating after said wax material has been permitted to substantially dry after deposition onto the mold surface.

15 2. A mold-release coating system as set forth in claim 1 wherein said barrier coating comprises at least two layers of said wax material, wherein each of said layers is permitted to substantially dry after deposition onto the mold surface.

20 3. A mold-release coating system as set forth in claim 1 wherein said release powder includes a plurality of droplets of a silicone material and a substantially thermoplastic powder material encapsulating 25 said droplets.

4. A mold-release coating system as set forth in claim 3 wherein said silicone material is first

atomized into said droplets that are caused to contact a source of the substantially thermoplastic material to be encapsulated thereby.

5               5. A mold-release coating system as set forth in claim 1 wherein said release powder is deposited onto said barrier coating in an amount in the range of about 0.3 to 1.0 grams.

10               6. A mold-release coating system as set forth in claim 1 wherein said release powder is deposited onto said barrier coating by electrostatic spraying.

15               7. A mold-release coating system for a mold surface, comprising:

                  a barrier coating of a substantially liquid wax material, wherein said wax material is deposited onto the mold surface, wherein said wax material includes about 7 to about 10 weight percent solids, wherein said wax material is permitted to substantially dry after deposition onto the mold surface; and

20               a release powder deposited onto said barrier coating after said wax material has been permitted to substantially dry after deposition onto the mold surface, wherein said release powder includes a plurality of droplets of a silicone material and a substantially thermoplastic powder material encapsulating said droplets, wherein said silicone material is first atomized into said

droplets that are caused to contact a source of said thermoplastic material to be encapsulated thereby.

8. A mold-release coating system as set forth  
5 in claim 7 wherein said barrier coating comprises at least  
two layers of the wax material, wherein each of said  
layers is permitted to substantially dry after deposition  
onto the mold surface.

10 9. A mold-release coating system as set forth  
in claim 7 wherein said release powder is deposited onto  
said barrier coating in an amount in the range of about  
0.3 to 1.0 grams.

15 10. A mold-release coating system as set forth  
in claim 7 wherein said release powder is deposited onto  
said barrier coating by electrostatic spraying.

11. A method for forming a mold-release coating  
system on a mold surface, comprising:

20 providing a barrier coating of a substantially  
liquid wax material, wherein the wax material includes  
about 7 to about 10 weight percent solids;

applying the wax material onto the mold surface;  
permitting wax material to substantially dry  
25 after application onto the mold surface;

providing a release powder; and  
applying the release powder onto the barrier  
coating after the wax material has been permitted to

substantially dry after application onto the mold surface.

12. A method as set forth in claim 11 wherein  
the barrier coating comprises at least two layers of the  
5 substantially liquid wax material, wherein each layer is  
permitted to substantially dry after deposition onto the  
mold surface.

13. A method as set forth in claim 11 wherein  
10 the release powder includes a plurality of droplets of a  
silicone material encapsulated by a substantially  
thermoplastic powder material.

14. A method as set forth in claim 13 including  
15 the steps of atomizing the silicone material into a  
plurality of droplets and encapsulating the droplets with  
a substantially thermoplastic material.

15. A method as set forth in claim 11 wherein  
20 said step of applying comprises applying the release  
powder to the barrier coating in an amount in the range of  
about 0.3 to 1.0 grams.

16. A method as set forth in claim 11 wherein  
25 said step of applying comprises electrostatic spraying the  
release powder onto the barrier coating.